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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------|------------------|
| 10/698,734 | 10/31/2003 | Denise L. Faustman | 00786/405003 | 3056 |
| 21559 7 | 590 03/10/2006 | EXAMINER | | |
| CLARK & ELBING LLP 101 FEDERAL STREET BOSTON, MA 02110 | | | BELYAVSKYI | , MICHAIL A |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1644 | |

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| Office Action Commons | 10/698,734 | FAUSTMAN, DENISE L. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Michail A. Belyavskyi | 1644 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE! | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| · | action is non-final. | | | | | |
| , | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| | x parte Quayle, 1955 C.D. 11, 45 | 13 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) <u>1-62</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) <u>1-62</u> are subject to restriction and/or expressions. | vn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner | • | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correcti | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau | • | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da 5) Notice of Informal Page 6) Other: | ate atent Application (PTO-152) | | | | |
| | | | | | | |

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DETAILED ACTION

1 Claims 1-62 are pending.

Restriction Requirement

- 2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
- I. Claims 1-12, 30,45, 46 and 53-62 are drawn to a method for increasing or maintaining the number of functional cells of a predetermined type, comprising administering a composition of untransfected pluripotent cells, classified in Class 424, subclasses 577 and 578.
- II. Claims 13-23, 30,45, 46 and 53-62 are drawn to a method for increasing or maintaining the number of functional cells of a predetermined type, comprising administering a composition of transfected pluripotent cells, classified in Class 424, subclasses 577 and 578.
- III. Claims 24-29 are drawn to a pluripotent cell transfected with HOX11 gene, classified in Class 435, subclasses 326 and 372.
- IV. Claims 31-44, 30, 45, 46 and 53-62 are drawn to a method for increasing or maintaining the number of functional cells of a predetermined type, comprising administering an agent that induces Hox 11-expressing pluripotent cells, classified in Class 424, subclass 184.1.
- V. Claims 47-52 are drawn to a method for increasing or maintaining the number of functional cells of a predetermined type, comprising administering an agent that selectively inhibits, removes or kills cell population that interfere with the trafficking of differentiation of or growth of pluripotent cells, classified in Class 424, subclass 184.1.
- 3. Groups I, II, IV and V are different methods. These inventions are different with respect to ingredients, method steps, and endpoints which require non-coextensive searches; therefore, each method is patentably distinct.

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- 4. Groups III and II are related as product and process of using. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case a pluripotent cell transfected with HOX11 gene can be used to produced conditioning media in addition to the recited method.
- 5. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct method steps. Moreover, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.
- 6. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement may be traversed.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michail Belyavskyi whose telephone number is 571/272-0840 The examiner can normally be reached Monday through Friday from 9:00 AM to 5:30 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571/272-0841.

The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MICHAIL BELYAVSKYI, PH.D. PATENT EXAMINER

3/06/06